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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/781,432 | 02/18/2004 | Teresa Marie Zander | 18874 | 3485 |

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KIMBERLY-CLARK WORLDWIDE, INC.
401 NORTH LAKE STREET
NEENAH, WI 54956

| EXAMINER | |
|---|---|
| HILL, LAURA C | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3761 | |

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/781,432 | ZANDER ET AL. | |
| | Examiner | Art Unit | |
| | Laura C. Hill | 3761 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *01 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

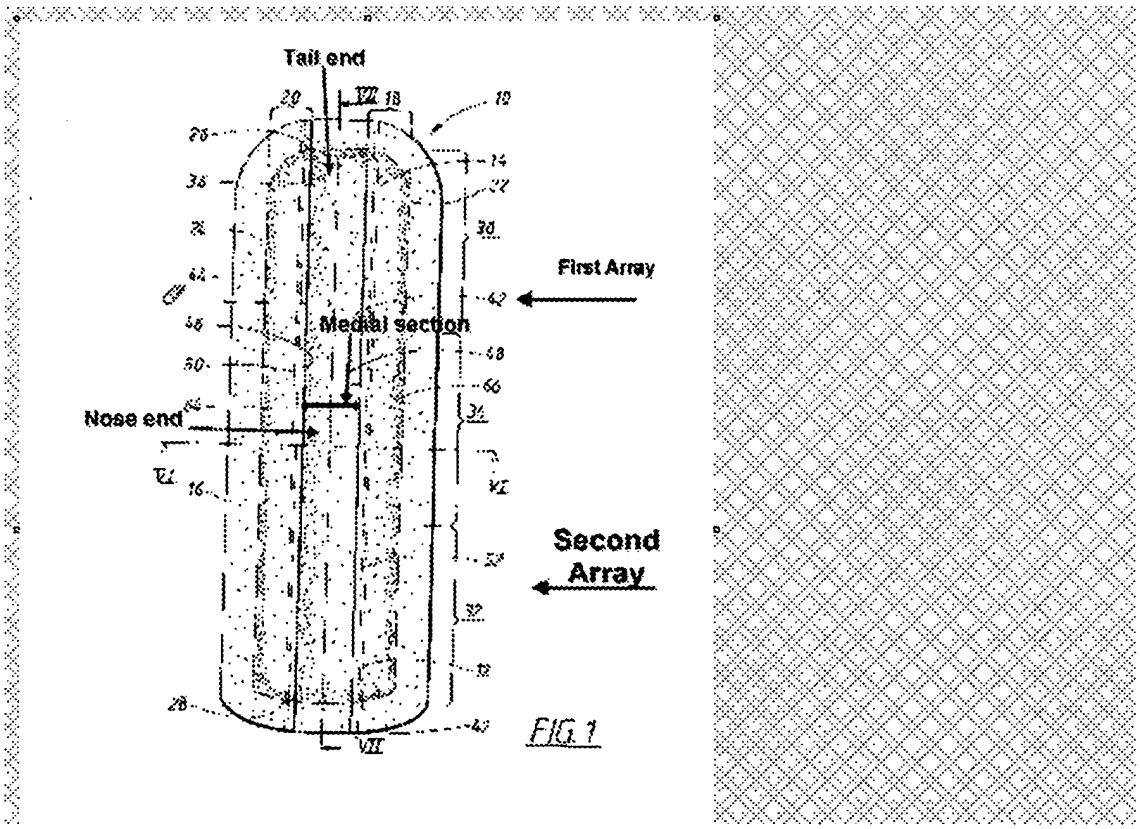
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *21 June 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1, 9-11, 14-15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Drevik (US PG Pubs 2002/0040212). Regarding claim 1 the Drevik reference discloses beads 54 on elastic members 50, 52(deformation-control member) that serve as spacing means 60 in a direction from the center of the napkin to the longitudinal sides of the napkin and contain the claimed array, medial portion and nose/tail-end configurations (figure 1, paragraphs 0029, ll. 1-6 and 0032, ll. 4-9).



Regarding claims 9-11 the Drevik reference discloses beads/stiffening elements that have a longer length dimension than width dimension and stiffening elements which are continuous along their length (axis VII) but some elements can also be discontinuous and located in an intermediate section/pocket 64 (figure 1).

Regarding claims 14-15, the Drevik reference discloses longitudinal edges 22, 24 analogous to first base-side section and first complementary-side section, respectively which are mirror images of one another (figure 1).

Regarding claim 17 the Drevik reference discloses long cylinders 56 alongside beads 54 in elastic members, which are up to 50 mm long (paragraph 0039, ll. 1-2).

Regarding claim 19 the Drevik reference discloses beads/stiffening elements that are substantially linear as claimed (figure 1).

2. Claims 2-8, 18 and 20-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Drevik (US PG Pubs 2002/0040212). Regarding claim 2 the Drevik reference discloses a first nose-end of the first array of stiffening elements 50,52 positioned in a central region, first tail-end positioned in a first end region, second nose-end of the second array positioned in a central region and second tail-end positioned toward a second end region of the article (see figure 1 in previous Office Action). The Drevik reference does not disclose the arrays are positioned *toward* the respective regions. However, it would be obvious to one of ordinary skill in the art at the time the invention was made that the arrays be positioned towards the respective regions since the Drevik reference has arrays

of stiffening elements 50,52 that prevent leakage and conform to the wearer's body.

Regarding claim 3 the Drevik reference discloses string of beads/stiffening elements discussed above may be created by point sealing and it would therefore be obvious to one skilled in the art from the teachings of Drevik that other formation methods could be used for stiffening elements including embossment (paragraph 0031, ll.1-3).

Regarding claims 4-5 the Drevik reference discloses absorbent article comprising absorbent core delimited by upper and lower surfaces, whereby a liquid permeable top sheet extends over upper surface and liquid barrier back sheet covers the lower surface of absorbent core (paragraph 0011, ll. 2-10). It would be obvious to combine the deformation-control member/ elastic members 50, 52 discussed above with the absorbent body configuration of Drevik with shaping layer/back sheet to have a control member which provides at least a portion of a shaping layer portion/back sheet of an absorbent body. With regard to claim 6, the Drevik reference discloses sanitary napkin 10 with absorbent core 12, permeable top sheet 36 and back sheet/baffle 42 with aforementioned structure (paragraph 0026, ll. 1-8).

Regarding claims 7-8 even though the medial portion width and length ranges are missing from the Drevik reference, these ranges would be obvious to those skilled in the art to improve overall article performance as specified.

Regarding claim 18 the Drevik reference discloses separation between adjacent stiffening elements to be at least 1 mm, which falls within the range claimed (paragraph 0044, ll. 1-2).

Regarding claim 20 the Drevik reference does not disclose curvilinear stiffening elements but it would be obvious to make them in this configuration to improve performance from the previously discussion of the stiffening elements.

Regarding claims 21-23 the Drevik reference discloses longitudinal elastic members with embossing located along longitudinal edge of absorbent core/shaping layer in central portion of absorbent article (paragraph 0011, ll. 13-16). Even though the Drevik reference has no supplemental layer, it would be obvious to add this layer, which is sandwiched between the garment and body-side of the shaping layer to help improve wicking as specified.

3. Based on withdrawn rejection of claims pertaining to Rasmussen et al. and Daniels et al., claims 12-13, 16 and 24-27 are hereby found unpatentable over Drevik (US PG Pubs 2002/0040212) as applied to claim 1 in view of Hansen et al. (US 6,222,092). Regarding claim 12 the Drevik reference discloses an article with a first array of stiffening regions with embossment elements and a second array arranged in a longitudinally opposed position relative to the first array of elements as discussed in rejected claim 3 but does not expressly disclose a fishbone configuration. The Hansen et al. reference discloses crotch region 40 of diaper 9 with rows of slits 50 to form barrier elements such as loop impediments to the flow of urine within the diaper when urine impinges against the liner layer 12 (col. 7, ll. 12-13 and 23-27). The Hansen et al. reference further

discloses the elements in a fishbone array but does not expressly disclose the elements are embossed or provide a stiffening feature (fig. 1). It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the stiffening regions of Drevik with the fishbone array of Hansen et al. since both references impede the flow of urine.

Regarding claim 13 the Drevik reference discloses the first and second stiffening elements as discussed in rejected claim 1 but does not expressly disclose a first and second alignment angle. The Hansen et al. reference discloses the parallel slits of the first and second array of barrier elements within each row are disposed at an acute alignment angle of 30-60 degrees to the longitudinal axis (col. 7, ll. 30-34). It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the stiffening elements of Drevik with the alignment angle of Hansen et al. since both references impede the flow of urine and since the claimed range of angles would obviously improve absorbent article function.

Regarding claim 16 the Drevik reference discloses the first and second stiffening elements as discussed in rejected claim 1 but does not expressly disclose a caliper percentage in the range claimed. It would be obvious to one of ordinary skill in the art at the time the invention was made to include a stiffening element structure capable of having the caliper values claimed for enhanced deformation and liquid distribution performance since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claims 24-26 the Drevik reference discloses the first and second stiffening elements as discussed in rejected claim 1 but does not expressly disclose a curved perimeter embossment with embossment regions avoiding intersecting the embossment. It would be obvious to one of ordinary skill in the art at the time the invention was made to include the claimed structure to enhance article performance since the Drevik reference discloses an article with improved body conforming and reduced leakage performance.

Regarding claim 27 the Drevik reference discloses the first and second stiffening elements with alignment angles discussed in rejected claim 13, base-side and complementary sections discussed in rejected claim 15 and fishbone configuration discussed in rejected claim 12. It would be obvious to one of ordinary skill in the art at the time the invention was made to combine all of the aforementioned elements since the Drevik in view of Hansen et al. references teach structures for liquid controlled absorption, thereby reducing leakage.

***Response to Arguments***

Applicant's arguments filed 01 March 2005 have been fully considered but not found persuasive.

4. In response to Applicant's argument of rejected claim 1 that 'Drevik fails to disclose or suggest an article which includes a deformation-control member having a selected stiffened region', the Drevik reference discloses an absorbent article with spacing means that create fluid conducting channels that allows fluid

to pass under barrier strips 46, 48 into pockets (paragraph 0012, ll. 5-7). The Drevik reference further discloses previously discussed elastic members 50,52/stiffening elements designed to curve the sanitary napkin 10 to the shape of the user's body and they constitute a means for raising the barrier strips 46,48 from upper surface 14 of sanitary napkin 10 (paragraph 0027, ll. 16-20). The Drevik reference further discloses barrier strips 46,48 and topsheet 36 create fluid-conducting channels 62 to ends of the absorbent article and any fluid moving towards the side of the napkin is guided via channels 62 into pockets 64,66 (paragraphs 0029, ll. 3-6 and 22-26).

In response to Applicant's argument of rejected claim 1 that Drevik does not disclose or suggest first and second arrays of stiffening elements with convergently and divergently arranged configurations, the Drevik reference discloses elastic members 50, 52 approaching each other and drawing apart from each other (fig. 1) "Convergent" is defined by Merriam-Webster online dictionary as “tending to approach each other” and “divergent” as “to move or extend in different directions, to draw apart”. Therefore from the aforementioned disclosure, Drevik suggests an article that contains a structure which functions as a conforming-means that is less susceptible to fluid leakage. Moreover from the Applicant's own admission the structures taught by Drevik are capable of providing desired regions of controlled flexibility and bending and are capable of providing desired levels of fit and comfort. If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim.

See, e.g., In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

In response to Applicant's argument of rejected claim 2 that "Drevik fails to suggest a configuration wherein each nose-end is positioned toward a central region of the article, and each tail-end is positioned toward an end region of the article, etc", the rejection of claim 2 under 35 USC § 102(b) is withdrawn and the rejection of claim 2 will herein be made under 35 USC § 103.

In response to Applicant's argument of rejected claim 3, the Drevik reference discloses long cylinders 58/stiffening elements that may be created by point sealing but does not disclose an embossment embodiment of the stiffening elements (paragraph 0035). It would be obvious the stiffening elements include embossment elements since the stiffening elements of Drevik function in the same manner as rejected claim 1 and since embossment elements offer no additional benefits over the prior art.

In response to Applicant's argument of rejected claim 4 the Drevik reference discloses elastic members 50,52, located on absorbent article, and made of elastic non-woven fibrous plastic (paragraph 0029).

In response to Applicant's argument of rejected claim 5, the Drevik reference discloses elastic/stiffening elements in a deformation-control member, which curve the sanitary napkin 10 to the shape of the user's body, but does not expressly disclose a shaping layer. It would be obvious to one of ordinary skill in the art at the time the invention was made to include this layer since the Drevik article shapes to the body contours of the wearer.

Applicant's arguments with respect to claims 1-7, 9-11, 13-16 and 18-26 based on Rasmussen et al. (PG Pub 2004/0176734), with respect to claims 1-6, 9-11, 16-17 and 21-23 based on Daniels et al. (US 6,319,239), with respect to claim 12 based on Drevik (PG Pub 2002/0040212) in view of Daniels et al., and with respect to Drevik in view of Rasmussen et al. have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on 571-272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura C. Hill
Examiner
Art Unit 3761

LCH

Larry I. Schwartz
Supervisory Patent Examiner
Group 3700